ELSEVIER

BioSystems 40 (1997) 281

BioSystems

Author index

Volume 40 (1997)

Akers, R.P. **40**, 55
Alicata, F. **40**, 127
Alvarez, F. **40**, 133
Aradi, I. **40**, 45
Av-Ron, E. **40**, 211
Ayala, G.F. **40**, 127

Barbi, M. **40**, 21
Borisyuk, G.N. **40**, 3
Borisyuk, R.M. **40**, 3
Boussard, E. **40**, 177, 211
Bugmann, G. **40**, 11
Bulsara, A.R. **40**, 37

Chillemi, S. **40**, 21, 119
Cottrell, M. **40**, 29

Diez-Martínez, O. **40**, 133
Di Garbo, A. **40**, 21
Doi, S. **40**, 169, 177

Elston, T.C. **40**, 37
Érdi, P. **40**, 45

Fishman, M. **40**, 219
Frank, S. **40**, 237

Gawne, T.J. **40**, 149
Getz, W.M. **40**, 55
Giorno, V. **40**, 65
Giraudo, M.T. **40**, 75
Gröbler, T. **40**, 45

Halici, U. **40**, 83
Hauske, G. **40**, 93

Jin, G.-X. **40**, 149

Kao, M.C. **40**, 103

Lánský, P. **40**, 203
Longtin, A. **40**, 111

Menzinger, M. **40**, 119
Migliore, M. **40**, 127
Movileanu, L. **40**, 263

Nobile, A.G. **40**, 65
Nomura, T. **40**, 169, 177

Pakdaman, K. **40**, 133, 177, 211
Pallbo, R. **40**, 141
Paton, R. **40**, 245
Piat, F. **40**, 29
Poon, P.W.F. **40**, 103
Popescu, D. **40**, 263

Racicot, D.M. **40**, 111
Ricciardi, L.M. **40**, 65
Richmond, B.J. **40**, 149
Rospars, J.-P. **40**, 29, 203
Rossokhin, A.V. **40**, 159
Rovinsky, A. **40**, 119

Sacerdote, L. **40**, 75
Sato, S. **40**, 169, 177
Segundo, J.P. **40**, 177
Seligmann, H. **40**, 257
Stiber, M. **40**, 177
Sun, X. **40**, 103

Treves, A. **40**, 189
Tsitolovsky, L.E. **40**, 159
Tuckwell, H. **40**, 203
Turcu, G. **40**, 263
Turova, T. **40**, 197

Vermeulen, A. **40**, 203
Vibert, J.-F. **40**, 133, 177, 211
Victor, G. **40**, 263

Yamanobe, T. **40**, 169

ELSEVIER

BioSystems 40 (1997) 283–286

JOURNAL OF Biotechnology

Subject index

Volume 40 (1997)

Adaptation; Transmittance of acquired character; Adaptive determinism; Salinity; *Sorghum bicolor* **40**, 257

Adaptive determinism; Transmittance of acquired character; Adaptation; Salinity; *Sorghum bicolor* **40**, 257

Analog-to-frequency transduction; Sensory receptors; Neural coding; Transduction function; Trigger zone; Dynamics of pulse-initiation **40**, 119

Ant societies; Natural selection theory; Qualitative dynamics **40**, 237

Association probabilities; Bilayer lipid membrane; Passive flip-flop diffusion; Selective association; Binary phospholipid mixture; Hydrophobic effect **40**, 263

Associative memory; Computer simulations; Kinetic model; Retrograde messenger **40**, 127

Auditory neuron; Neural modeling; Vocalization sound; Frequency modulation; Receptive field **40**, 103

Bilayer lipid membrane; Passive flip-flop diffusion; Selective association; Binary phospholipid mixture; Association probabilities; Hydrophobic effect **40**, 263

Binary phospholipid mixture; Bilayer lipid membrane; Passive flip-flop diffusion; Selective association; Association probabilities; Hydrophobic effect **40**, 263

Cable equation; Sensory coding; Single neuron modelling; Olfaction **40**, 203

Chaos; Pacemaker inhibition; Synaptic coding; Nonlinear dynamics; Phase locking; Crayfish stretch receptor organ **40**, 177

Chaos; Pacemaker neuron; Time phase; Phase transition curve; Periodic input; Phase locking; Non-periodic input **40**, 169

Computational neuroscience; Neuron modeling; Simulation tool; Neural networks **40**, 211

Computer simulation; Motion detection; Spontaneous activity; Noisy stimuli **40**, 141

Computer simulations; Kinetic model; Associative memory; Retrograde messenger **40**, 127

Crayfish stretch receptor organ; Pacemaker inhibition; Synaptic coding; Nonlinear dynamics; Phase locking; Chaos **40**, 177

Decoding; Face cells; Place cells; Information theory; Quasi-distances; Ultrametricity **40**, 189

Diffusion processes; Ornstein-Uhlenbeck process; First-passage-time **40**, 65

Dynamics; Oscillatory neural networks; Synchronization; Neural activity **40**, 3

Dynamics of pulse-initiation; Analog-to-frequency transduction; Sensory receptors; Neural coding; Transduction function; Trigger zone **40**, 119

Epigenetic system; Gene; Syntax/semantics; Hierarchy; Talkback **40**, 245

Face cells; Place cells; Information theory; Decoding; Quasi-distances; Ultrametricity **40**, 189

First passage studies; Neural dynamics; Periodic stimuli **40**, 37

First-passage-time; Diffusion processes; Ornstein-Uhlenbeck process **40**, 65

First-passage-time; Neuronal modelling; Moments **40**, 75

Forecasting; Neural modeling; Point processes; Non-linear dynamics; Phase locking; Noise **40**, 111

Frequency modulation; Neural modeling; Auditory neuron; Vocalization sound; Receptive field **40**, 103

Game theoretical methods; Interspecies competition; Population level strategies **40**, 219

Gene; Syntax/semantics; Hierarchy; Epigenetic system; Talkback **40**, 245

Graded-response model; Recurrent excitation; Threshold model; Periodic modulation; Hysteresis **40**, 133

Hierarchy; Gene; Syntax/semantics; Epigenetic system; Talkback **40**, 245

Hippocampus; Single neuron dynamics; Neural population; Olfactory bulb **40**, 45

Hydrophobic effect; Bilayer lipid membrane; Passive flip-flop diffusion; Selective association; Binary phospholipid mixture; Association probabilities **40**, 263

Hysteresis; Recurrent excitation; Graded-response model; Threshold model; Periodic modulation **40**, 133

Image quality; Self-organizing map; Vector quantization **40**, 93

Information theory; Face cells; Place cells; Decoding; Quasi-distances; Ultrametricity **40**, 189

Insect olfaction; Monte Carlo simulation; Sensillum basiconica **40**, 55

Interpretation; Neuronal codes; Network organisation; Signal processing **40**, 149

Interspecies competition; Population level strategies; Game theoretical methods **40**, 219

Kinetic model; Computer simulations; Associative memory; Retrograde messenger **40**, 127

Lateral inhibition; Neural network; Spiking dynamics; Olfaction; Odor quality coding **40**, 29

Leaky integrator; Neuron model; Neural code; Neural modelling; Motion detection; Short-term memory; Timing; Multiplication **40**, 11

Learning; Mathematical model; Neuron; Sodium channel; Memory **40**, 159

Markov chain; Ornstein-Uhlenbeck process; Neural network; Process of inhibitions **40**, 197

Mathematical model; Neuron; Sodium channel; Learning; Memory **40**, 159

Mazes; Random neural networks; Reinforcement learning; Recency effect **40**, 83

Memory; Mathematical model; Neuron; Sodium channel; Learning **40**, 159

Moments; Neuronal modelling; First-passage-time **40**, 75

Monte Carlo simulation; Insect olfaction; Sensillum basiconica **40**, 55

Motion detection; Neuron model; Neural code; Neural modelling; Leaky integrator; Short-term memory; Timing; Multiplication **40**, 11

Motion detection; Spontaneous activity; Computer simulation; Noisy stimuli **40**, 141

Multiplication; Neuron model; Neural code; Neural modelling; Leaky integrator; Motion detection; Short-term memory; Timing **40**, 11

Natural selection theory; Ant societies; Qualitative dynamics **40**, 237

Network organisation; Neuronal codes; Signal processing; Interpretation **40**, 149

Neural activity; Oscillatory neural networks; Synchronization; Dynamics **40**, 3

Neural activity; Phase-locking; Sinusoidal forcing; Non-linear predictability methods **40**, 21

Neural code; Neuron model; Neural modelling; Leaky integrator; Motion detection; Short-term memory; Timing; Multiplication **40**, 11

Neural coding; Analog-to-frequency transduction; Sensory receptors; Transduction function; Trigger zone; Dynamics of pulse-initiation **40**, 119

Neural dynamics; Periodic stimuli; First passage studies **40**, 37

Neural modeling; Auditory neuron; Vocalization sound; Frequency modulation; Receptive field **40**, 103

Neural modeling; Point processes; Non-linear dynamics; Phase locking; Noise; Forecasting **40**, 111

Neural modelling; Neuron model; Neural code; Leaky integrator; Motion detection; Short-term memory; Timing; Multiplication **40**, 11

Neural network; Markov chain; Ornstein-Uhlenbeck process; Process of inhibitions **40**, 197

Neural network; Spiking dynamics; Lateral inhibition; Olfaction; Odor quality coding **40**, 29

Neural networks; Neuron modeling; Computational neuroscience; Simulation tool **40**, 211

Neural population; Single neuron dynamics; Olfactory bulb; Hippocampus **40**, 45

Neuron; Mathematical model; Sodium channel; Learning; Memory **40**, 159

Neuron model; Neural code; Neural modelling; Leaky integrator; Motion detection; Short-term memory; Timing; Multiplication **40**, 11

Neuron modeling; Computational neuroscience; Simulation tool; Neural networks **40**, 211

Neuronal codes; Network organisation; Signal processing; Interpretation **40**, 149

Neuronal modelling; First-passage-time; Moments **40**, 75

Noise; Neural modeling; Point processes; Non-linear dynamics; Phase locking; Forecasting **40**, 111

Noisy stimuli; Motion detection; Spontaneous activity; Computer simulation **40**, 141

Non-linear dynamics; Neural modeling; Point processes; Phase locking; Noise; Forecasting **40**, 111

Non-linear predictability methods; Neural activity; Phase-locking; Sinusoidal forcing **40**, 21

Non-periodic input; Pacemaker neuron; Time phase; Phase transition curve; Periodic input; Phase locking; Chaos **40**, 169

Nonlinear dynamics; Pacemaker inhibition; Synaptic coding; Phase locking; Chaos; Crayfish stretch receptor organ **40**, 177

Odor quality coding; Neural network; Spiking dynamics; Lateral inhibition; Olfaction **40**, 29

Olfaction; Neural network; Spiking dynamics; Lateral inhibition; Odor quality coding **40**, 29

Olfaction; Sensory coding; Cable equation; Single neuron modelling **40**, 203

Olfactory bulb; Single neuron dynamics; Neural population; Hippocampus **40**, 45

Ornstein-Uhlenbeck process; Diffusion processes; First-passage-time **40**, 65

Ornstein-Uhlenbeck process; Markov chain; Neural network; Process of inhibitions **40**, 197

Oscillatory neural networks; Synchronization; Dynamics; Neural activity **40**, 3

Pacemaker inhibition; Synaptic coding; Nonlinear dynamics; Phase locking; Chaos; Crayfish stretch receptor organ **40**, 177

Pacemaker neuron; Time phase; Phase transition curve; Periodic input; Phase locking; Chaos; Non-periodic input **40**, 169

Passive flip-flop diffusion; Bilayer lipid membrane; Selective association; Binary phospholipid mixture; Association probabilities; Hydrophobic effect **40**, 263

Periodic input; Pacemaker neuron; Time phase; Phase transition curve; Phase locking; Chaos; Non-periodic input **40**, 169

Periodic modulation; Recurrent excitation; Graded-response model; Threshold model; Hysteresis **40**, 133

Periodic stimuli; Neural dynamics; First passage studies **40**, 37

Phase locking; Neural modeling; Point processes; Non-linear dynamics; Noise; Forecasting **40**, 111

Phase locking; Pacemaker inhibition; Synaptic coding; Nonlinear dynamics; Chaos; Crayfish stretch receptor organ **40**, 177

Phase locking; Pacemaker neuron; Time phase; Phase transition curve; Periodic input; Chaos; Non-periodic input **40**, 169

Phase transition curve; Pacemaker neuron; Time phase; Periodic input; Phase locking; Chaos; Non-periodic input **40**, 169

Phase-locking; Neural activity; Sinusoidal forcing; Non-linear predictability methods **40**, 21

Place cells; Face cells; Information theory; Decoding; Quasi-distances; Ultrametricity **40**, 189

Point processes; Neural modeling; Non-linear dynamics; Phase locking; Noise; Forecasting **40**, 111

Population level strategies; Interspecies competition; Game theoretical methods **40**, 219

Process of inhibitions; Markov chain; Ornstein-Uhlenbeck process; Neural network **40**, 197

Qualitative dynamics; Natural selection theory; Ant societies **40**, 237

Quasi-distances; Face cells; Place cells; Information theory; Decoding; Ultrametricity **40**, 189

Random neural networks; Reinforcement learning; Mazes; Recency effect **40**, 83

Recency effect; Random neural networks; Reinforcement learning; Mazes **40**, 83

Receptive field; Neural modeling; Auditory neuron; Vocalization sound; Frequency modulation **40**, 103

Recurrent excitation; Graded-response model; Threshold model; Periodic modulation; Hysteresis **40**, 133

Reinforcement learning; Random neural networks; Mazes; Recency effect **40**, 83

Retrograde messenger; Computer simulations; Kinetic model; Associative memory **40**, 127

Salinity; Transmittance of acquired character; Adaptation; Adaptive determinism; *Sorghum bicolor* **40**, 257

Selective association; Bilayer lipid membrane; Passive flip-flop diffusion; Binary phospholipid mixture; Association probabilities; Hydrophobic effect **40**, 263

Self-organizing map; Vector quantization; Image quality **40**, 93

Sensillum basiconica; Insect olfaction; Monte Carlo simulation **40**, 55

Sensory coding; Cable equation; Single neuron modelling; Olfaction **40**, 203

Sensory receptors; Analog-to-frequency transduction; Neural coding; Transduction function; Trigger zone; Dynamics of pulse-initiation **40**, 119

Short-term memory; Neuron model; Neural code; Neural modelling; Leaky integrator; Motion detection; Timing; Multiplication **40**, 11

Signal processing; Neuronal codes; Network organisation; Interpretation **40**, 149

Simulation tool; Neuron modeling; Computational neuroscience; Neural networks **40**, 211

Single neuron dynamics; Neural population; Olfactory bulb; Hippocampus **40**, 45

Single neuron modelling; Sensory coding; Cable equation; Olfaction **40**, 203

Sinusoidal forcing; Neural activity; Phase-locking; Non-linear predictability methods **40**, 21

Sodium channel; Mathematical model; Neuron; Learning; Memory **40**, 159

Spiking dynamics; Neural network; Lateral inhibition; Olfaction; Odor quality coding **40**, 29

Spontaneous activity; Motion detection; Computer simulation; Noisy stimuli **40**, 141

Synaptic coding; Pacemaker inhibition; Nonlinear dynamics; Phase locking; Chaos; Crayfish stretch receptor organ **40**, 177

Synchronization; Oscillatory neural networks; Dynamics; Neural activity **40**, 3

Syntax/semantics; Gene; Hierarchy; Epigenetic system; Talkback **40**, 245

Talkback; Gene; Syntax/semantics; Hierarchy; Epigenetic system **40**, 245

Threshold model; Recurrent excitation; Graded-response model; Periodic modulation; Hysteresis **40**, 133

Time phase; Pacemaker neuron; Phase transition curve; Periodic input; Phase locking; Chaos; Non-periodic input **40**, 169

Timing; Neuron model; Neural code; Neural modelling; Leaky integrator; Motion detection; Short-term memory; Multiplication **40**, 11

Transduction function; Analog-to-frequency transduction; Sensory receptors; Neural coding; Trigger zone; Dynamics of pulse-initiation **40**, 119

Transmittance of acquired character; Adaptation; Adaptive determinism; Salinity; *Sorghum bicolor* **40**, 257

Trigger zone; Analog-to-frequency transduction; Sensory receptors; Neural coding; Transduction function; Dynamics of pulse-initiation **40**, 119

Ultrametricity; Face cells; Place cells; Information theory; Decoding; Quasi-distances **40**, 189

Vector quantization; Self-organizing map; Image quality **40**, 93

Vocalization sound; Neural modeling; Auditory neuron; Frequency modulation; Receptive field **40**, 103